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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,203

03/11/2004

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11371-20

6176

7590 05/28/2008  
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EXAMINER

KAO, CHIH CHENG G

ART UNIT

PAPER NUMBER

2882

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,203	<b>Applicant(s)</b> RAINER, HAUPL	
	<b>Examiner</b> Chih-Cheng Glen Kao	<b>Art Unit</b> 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 8, 2008, has been entered.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 8 and 9 is withdrawn in view of 35 U.S.C. 112, first paragraph. Rejections based on this patent law follow.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 2, 4-9, and 11-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1 and 11, the claims call for rotation over an angle of greater than 180 degrees. Although the specification as originally filed describes a rotation of 90 degrees (figs. 1 and 2; and paragraph 8), it does not disclose rotation over an angle of greater than 180 degrees. Consequently there is doubt as to whether Applicant had possession of the claimed invention at the time of filing. Therefore, the claims have been rejected for failing to comply with the written description requirement. Claims 2, 4-9, 12, and 13 are rejected for the above reason by virtue of their dependency.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5, 7, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khutoryansky et al. (US 5636259) in view of Mekker et al. (US 4727564).

5. Regarding claim 1, Khutoryansky et al. discloses a support system for an x-ray source, comprising a ceiling holding (fig. 3, via #394) including a mounting device (fig. 3, #154), and a support arm fixedly secured about a horizontal axis (fig. 3, #278 and 284) to the mounting device, such that the x-ray source (fig. 3, #112) is secured, rotatably about a substantially horizontal axis (fig. 3, #188), to the support arm, wherein a lower edge of the mounting device (fig. 3, lower edge of #276) and a lower edge of the support arm (fig. 3, lower edge of #278) are

Art Unit: 2882

disposed vertically below the horizontal axis of rotation (fig. 3, #188) of the x-ray source, and wherein the horizontal axis of rotation (fig. 3, #188) of the x-ray source is positioned on the support arm such that a portion of an envelope (figs. 8-13, exterior of #112) of the x-ray source remains below the lower edge of the support arm (fig. 3, lower edge of #278) and the lower edge of the mounting device (fig. 3, lower edge of #276) if the envelope is rotated over an angle greater than 180 degrees (figs. 10 and 11, in particular) about the horizontal axis of rotation (figs. 8-13, #188).

However, Khutoryansky et al. fails to disclose rotation over an angle greater than 180 degrees.

Mekker et al. teaches rotation over an angle greater than 180 degrees (fig. 4, #50).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the system of Khutoryansky et al. with the rotation of Mekker et al., since one would have been motivated to make such a modification for greater movement and flexibility (abstract) as implied from Mekker et al.

Furthermore, since the Examiner finds that the prior art (i.e., Khutoryansky et al.) contained a “base” system upon which the claimed invention can be seen as an “improvement”, and since the Examiner finds that the prior art (i.e., Mekker et al.) contained a “comparable” system that has been improved in the same way as the claimed invention, the Examiner thus finds that one of ordinary skill in the art could have applied the known “improvement” technique (of Mekker et al.) in the same way to the “base” system (of Khutoryansky et al.) and the results would have been predictable to one of ordinary skill in the art. Therefore, such a claimed combination would have been obvious.

6. Regarding claim 11, Khutoryansky et al. discloses a support system for an x-ray source, comprising a supporting platform (fig. 3, via #394) including a mounting device (fig. 3, #154), and a support arm fixedly secured about a horizontal axis (fig. 3, #278 and 284) to the mounting device, such that the x-ray source (fig. 3, #112) is secured, rotatably about a substantially horizontal axis (fig. 3, #188), to the support arm, wherein a lower edge of the mounting device (fig. 3, lower edge of #276) and a lower edge of the support arm (fig. 3, lower edge of #278) are disposed vertically below the horizontal axis of rotation (fig. 3, #188) of the x-ray source, wherein the x-ray source has an envelope (figs. 8-13, exterior of #112), and wherein the horizontal axis of rotation (fig. 3, #188) of the x-ray source is positioned on the support arm such that a portion of the envelope (figs. 8-13, exterior of #112) of the x-ray source remains below the lower edge of the support arm (fig. 3, lower edge of #278) and the lower edge of the mounting device (fig. 3, lower edge of #276) if the envelope is rotated plus or minus 180 degrees (figs. 10 and 11, in particular) about the horizontal axis of rotation (figs. 8-13, #188).

However, Khutoryansky et al. fails to disclose rotation over an angle greater than 180 degrees.

Mekker et al. teaches rotation over an angle greater than 180 degrees (fig. 4, #50).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the system of Khutoryansky et al. with the rotation of Mekker et al., since one would have been motivated to make such a modification for greater movement and flexibility (abstract) as implied from Mekker et al.

Furthermore, since the Examiner finds that the prior art (i.e., Khutoryansky et al.) contained a “base” system upon which the claimed invention can be seen as an “improvement”, and since the Examiner finds that the prior art (i.e., Mekker et al.) contained a “comparable” system that has been improved in the same way as the claimed invention, the Examiner thus finds that one of ordinary skill in the art could have applied the known “improvement” technique (of Mekker et al.) in the same way to the “base” system (of Khutoryansky et al.) and the results would have been predictable to one of ordinary skill in the art. Therefore, such a claimed combination would have been obvious.

7. Regarding claim 2, Khutoryansky et al. further discloses wherein the support arm comprises a substantially right angled bend (fig. 3, #278 and 284).

8. Regarding claim 4, Khutoryansky et al. further discloses wherein the support arm (fig. 3, #278 and 284) is fixedly secured about a vertical axis to the mounting device (fig. 3, #154).

9. Regarding claims 5 and 13, Khutoryansky et al. further discloses wherein the mounting device is substantially vertically adjustable (fig. 3, via #156).

10. Regarding claim 7, Khutoryansky et al. further discloses wherein a line extension of the horizontal axis of rotation (fig. 3, #188) of the x-ray source extends through the mounting device (fig. 3, #154).

Art Unit: 2882

11. Regarding claim 12, Khutoryansky et al. further discloses wherein the supporting platform is moveable (fig. 1, along #140 and 142).

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khutoryansky et al. and Mekker et al. as applied to claim 1 above, and further in view of Horbaschek (US 2002/0118793).

Khutoryansky et al. as modified above suggests a system as recited above.

However, Khutoryansky et al. fails to disclose wherein a ceiling holder is rotatable about a substantially vertical axis.

Horbaschek teaches wherein a ceiling holder is rotatable about a substantially vertical axis (fig. 4 and paragraph 25, lines 6-9).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to further modify the system of Khutoryansky et al. as modified above with the rotatable ceiling holder of Horbaschek, since one would have been motivated to make such a modification for more maneuverability (figs. 1-5) as implied from Horbaschek.

#### ***Allowable Subject Matter***

13. Claim 14 is allowed. The following is a statement of reasons for the indication of allowable subject matter.

The prior art fails to disclose or fairly suggest a support system for an x-ray source, including wherein the horizontal axis of rotation of the x-ray source is positioned on the support arm such that a lower edge of the x-ray source is disposed below the lower edge of the support



Art Unit: 2882

arm and the lower edge of the mounting device, independently of an x-ray source angle of rotation about the horizontal axis, wherein a line extension of the horizontal axis of rotation of the x-ray source is laterally displaced with respect to the vertical axis of symmetry of the mounting device, and is parallel to lines extending along each of two side edges of the x-ray source; and wherein one of the lines of one of the two side edges of the x-ray source extends on one vertical side of the mounting device, and the other line of the other side edge extends through the mounting device, in combination with all of the other limitations in the claim.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 1, 2, 4-9, and 11-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chih-Cheng Glen Kao/  
Primary Examiner, Art Unit 2882